

## A Dedicated Public Health Cadre: Urgent and Critical to Improve Health in India

### Background

India has made considerable progress in public health recently as seen in the accelerating declines in infant mortality rates, under-five mortality rates, and maternal mortality ratios, all sensitive indicators of health system performance.<sup>[1]</sup> In addition, recent reforms and innovations under the government's flagship programme, the National Health Mission have resulted in significant improvements in access to key health care indicators like institutional deliveries, antenatal care, complete immunization, and disease control programmes, to name a few. Yet, the country's health system continues to face many challenges and several planned health goals have failed to keep pace with rapid economic growth. For example, despite a decline in child malnutrition rates over the past few decades, India continues to have the highest number of malnourished children in the world today.<sup>[2]</sup> A comparison with some of our South Asian neighbours such as Bangladesh and Sri Lanka throws up an interesting international contrast - despite broadly similar health sector spending and socioeconomic development, these countries have achieved relatively better health outcomes. For example, the under-five mortality rate in the neighboring counties of Sri Lanka, Nepal and Bangladesh is 9, 36, and 38 respectively whereas it is 48 in India.<sup>[3]</sup> An important feature contributing to improved health outcomes not only in the developed world but also across select states in India is the presence of a dedicated, efficient and adequately resourced public health cadre. With professionally trained public health professionals and often the support of robust public health regulations, these cadres have contributed to improved health, environment, and development outcomes.

### Evidence for the Need of A Public Health Cadre

Countries in the developed world have made concerted efforts to invest in public health. For over 125 years,<sup>[4]</sup>

this commitment to population health in the form of strengthened departments of public health with ring fenced budgets has helped protect its people from exposure to disease, environmental threats, and helped add years to life - and life to years. From well-trained health professionals in independent and locally accountable public health teams within local authorities (as in the UK) to the robust engagement of community level workers (as in countries like Thailand), these institutional arrangements for public health delivery have had a significant effect on improving population health outcomes.

The profile of public health in India where health is a state subject, is somewhat different. Although public health interventions are delivered by numerous functionaries from the grass-root to higher administrative levels, apart from a few states (such as Tamil Nadu and Maharashtra) these functionaries are not organized in a separate, systematically trained public health cadre. In addition, the absence of a comprehensive Public Health Act in most states means that health officials lack the regulatory authority and powers to enforce public health legislation adequately. The lack of a separate public health directorate further compromises their independence, effectiveness, and efficiency.

The state of Tamil Nadu has been included as a case study alongwith four other countries-Bangladesh, Ethiopia, Kyrgyzstan and Thailand for achieving favourable health outcomes at low cost<sup>(5)</sup> before A review of proxy indicators from Tamil Nadu demonstrates the effectiveness of a public health cadre.

A review of proxy indicators from Tamil Nadu demonstrates the effectiveness of a public health cadre

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**Cite this article as:** Kumar S, Bothra V, Mairembam DS. A dedicated public health cadre: Urgent and critical to improve health in India. Indian J Community Med 2016;41:253-5.

Access this article online	
Quick Response Code:	Website: www.ijcm.org.in
	DOI: 10.4103/0970-0218.193336

in improving population health. This is evidenced from some of the following facts:

### Value for money

Tamil Nadu has among the best public health outcome indicators among states in India. The state performs better than other states with regards to full child immunization coverage, as well as the percentage of women receiving complete antenatal care and comprehensive postnatal check-ups. In fact, for most health indicators, Kerala is the only large state with better outcomes. Yet, it is significant that the state does not spend more than the national average on health, despite having one of the best health indicators. Even more significantly, private expenditure per capita on health for the state is significantly lower than the national average. In contrast, Kerala's public expenditure on health is well above the national average and private expenditure more than twice the national average.<sup>[5]</sup>

### Epidemic/outbreak control

Tamil Nadu has demonstrated remarkable success in eradicating diseases, sometimes well ahead of national programmes. Guinea worm was eradicated in the state by 1982; the national programmes for eradication of guinea worm only commenced in 1994.

Providing emphasis on rare, emerging, and re-emerging diseases has ensured that it is one of the sole repositories for exotic infections like plague. This has been possible due to the emphasis on communicable disease control provided by the Directorate of Public Health. Its importance came to light during the plague outbreak of 1994 in Western India, when a team from the plague surveillance unit in Tamil Nadu was sent to Maharashtra and Gujarat to help control the outbreak there.

In Maharashtra, the public health department works in close coordination with inter sectoral partners, departments outside health and community organizations to conduct timely investigation and effective management of outbreaks and incidents of communicable diseases. In addition, public health workers conduct active surveillance through house-to-house screening for infectious diseases and also undertake vector control measures where appropriate.

### Disaster management

Tamil Nadu with its public health trained cadre adopts an annual cycle of anticipatory planning for responding to potential natural disasters such as floods and cyclones. This ensures that when catastrophic disasters like the tsunami of 2004 strike, the state has the internal resilience to deal with it. None less than the World Health Organization has commended the state government for carrying out relief measures largely on their own.

## Progress on Public Health Cadre in India so Far

### Public health cadre in policy-current position

Various national committees and expert groups since 1946 have recommended the establishment of a public health cadre across states:

- The Health Survey and Development Committee (Bhore Committee, 1946) offers a comprehensive assessment of the state of public health in India and makes recommendations for the training of the public health workforce.<sup>[6]</sup>
- The High Level Expert Group on Universal Health Coverage (2012) recommends the creation of an All India public health cadre.<sup>[2]</sup>
- The Steering committee on the 12th 5-year plan (2012) also calls for the establishment of public health cadres and their empowerment under the Public Health Act.<sup>[8]</sup>
- A recently convened meeting of Health Secretaries (October 9, 2014) chaired by the Union Minister for Health approved an action point to strengthen public health cadres in states through innovative means.
- The draft National Health Policy (2016) recommends that adequately trained professionals hold senior leadership positions in public health.
- The recently held 43rd Annual Conference of Indian Association of Preventive and Social Medicine at Ahmadabad, 7-9 January 2016, strongly recommended establishment of Public Health cadre to expedite improvement in health in India.

States are at different stages of cadre implementation. Based on implementation status, states can broadly be grouped in to one of four categories: (a) those with a well-established cadre, e.g. Tamil Nadu, Maharashtra; (b) those with some select components of the cadre in place, e.g. West Bengal, Kerala; (c) states actively pursuing cadre formation, e.g. Odisha, MP, Chhattisgarh; and (d) states still in the contemplation phase; e.g. Karnataka, Haryana, some NE states.

## The Road Map

A national secretariat set up by the Ministry of Health and Family Welfare in 2015 to support states with cadre formation suggests certain guiding principles for their establishment. Inter alia these include:

- A recognition that the process of cadre establishment will be led by individual states.
- The cadre should be developed at three levels - block, district, and state. Some states may also wish to add a component at the divisional level.
- This process should involve minimal restructuring and disruption of existing administrative and service

delivery structures. However, some new positions may need to be created.

- There will be four critical components in the public health workforce: (a) public health administrative and leadership posts (to be headed by doctors with public health training), (b) technical staff (epidemiologists, entomologists, health informatics/surveillance officers), (c) trained public health management staff, and (d) grass root front line public health workers (female and male multipurpose workers).
- States may wish to adopt a strategy whereby doctors joining public service choose to enter either the clinical cadre (providing clinical care) or the public health cadre (with a predominant public health role).
- Building a public health cadre should involve a judicious mix of employing doctors with preexisting public health qualifications and/or providing in-service public health training to existing doctors. Initially states may wish to sponsor in-service doctors interested in joining the public health cadre to quality assured public health training programmes. In the medium and long term, it should be made a prerequisite that doctors joining public health need to possess a relevant higher qualification, e.g. degree/diploma in public health or a Masters in Public Health.
- Priority should also be given to training other functionaries in the public health cadre - the technical and management staff along with the front line public health workers.
- States should consider adopting a comprehensive Public Health Act to provide regulatory powers for enforcement to its functionaries.

## Role of Public Health Professional Bodies

Some states are committed to establishing public health cadres and are making concerted efforts in that direction. Others are still contemplating issues such as its institutional framework, effectiveness, utility and governance arrangements. Here the role of effective advocacy through professional bodies such as the Indian Association of Preventive and Social Medicine (IAPSM), Indian Public Health Association (IPHA) and academic institutions is critical.

## Conclusion

The experience of Tamil Nadu has provided three important observations for other states exploring the feasibility of establishing their own public health cadre<sup>[7]</sup>:

(a) It is replicable across states: The administrative foundations for health are similar across states in India; public health cadres can be established with minimal restructuring and disruption at block, district and state level. (b) It is affordable: only modest additional investments are required to train a limited number of public health professionals; setting up a public health cadre does not require massive resources. (c) It is effective and efficient: the state spends less than the national average on health. Also - and very importantly - out-of-pocket private expenditure in Tamil Nadu is much lower than the national average. Yet, the state has the second best public health indicators in the country. A large measure of their success has been attributed to the major efficiency gains from a public health cadre which is separate from the clinical cadre.

## Financial support and sponsorship

Nil.

## Conflicts of interest

There are no conflicts of interest.

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